

Indoor Fugitive Emissions

NR 445 Technical Advisory Work Group
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Indoor Fugitive Emissions

- Use in Different Program Elements
 - Standards
 - Permits
 - Inventory
- Original Premise (1988)
- Concerns
- Initial Proposal (November 2000)
- Reaction
- Staff Recommendations





Acute, Non-carcinogenic HAP's

New Sources

- Included in determining applicability thresholds for standards in NR 445.04 (no exclusion listed)
- Not included in determining whether total source impact exceeds AAC - NR 445.04(1)(c)4, (2)(c)2 & (4)(c)4
- Not included in determining whether a source needs a construction permit - NR 406.04(3)(c)
- Included for inventory reporting NR 438 (no exclusion)





Acute, Non-carcinogenic HAP's

Existing Sources

- Not included in determining applicability thresholds for standards - NR 445.05(6)(d)3
- Not included in determining whether total source impact exceeds AAC - NR 445.05(1)(c)4, (2)(c)2 & (4)(c)4
- Included in determining whether a source needs an operation permit (based on MTE, no exclusion listed)
- Included for inventory reporting NR 438 (no exclusion)



Chronic, Non-carcinogenic HAP's (RfC's)

New Sources

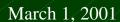
- Included in determining applicability thresholds for standards in NR 445.04 (no exclusion listed)
- Not included in determining whether total source impact exceeds RfC if they have a TLV and are in compliance w/ OSHA - NR 445.04(4r)(b)4
- Not included in determining whether a source needs a construction permit - NR 406.04(3)(c)
- Included for inventory reporting NR 438 (no exclusion)



Chronic, Non-carcinogenic HAP's (RfC's)

Existing Sources

- Not included in determining applicability thresholds for standards if they have a TLV and are in compliance w/ OSHA - NR 445.05(6)(d)7
- Not included in determining whether total source impact exceeds RfC if they have a TLV and are in compliance w/ OSHA - NR 445.05(4r)(b)4
- Included in determining whether a source needs an operation permit (based on MTE, no exclusion listed)
- Included for inventory reporting NR 438 (no exclusion)





Carcinogenic HAP's

New Sources

- Included in determining applicability thresholds for standards in NR 445.04 (no exclusion listed)
- Not included in determining whether BACT or LAER apply if they have a TLV and are in compliance w/ OSHA NR 445.04(3)(c)6
- Included in determining whether a source needs a construction permit (no exclusion listed)
- Included for inventory reporting NR 438 (no exclusion)



Carcinogenic HAP's

Existing Sources

- Included in determining applicability thresholds for standards (no exclusion listed)
- Not included in determining whether BACT or LAER apply if they have a TLV and are in compliance w/ OSHA NR 445.05(3)(c)7
- Included in determining whether a source needs an operation permit (based on MTE, no exclusion listed)
- Included for inventory reporting NR 438 (no exclusion)





Original Premise (1988)

- Not a Public Health Concern
 - Dilution will protect public health
- Difficult to Quantify
- Costly to Control
- Indoor Air Quality Regulated by OSHA



DNR (& Public Health Agencies) Concerns

- Inconsistent Application & Lack of Clarity
 - general ventilation (e.g., open sides, doors & windows)
 - not all carcinogens have TLV's
 - means/demo of compliance (e.g., supplied air)
- No Evaluation of Acute Impact
- Close Fence Lines
- No Evaluation of Ability to Reduce Emissions





Initial Proposal (November 2000)

- Change Definition
 - better define enclosure (PSD)
 - examine "ability to control"
- Require All HAP's to Demonstrate Meeting OSHA Requirements
- Emissions Not Released to Ambient Air Are Not Regulated





Reaction

Regulated Community

- Proposal would significantly increase regulatory burden (number of HAP's)
- DNR does not have regulatory authority
- Change in definition does not remove ambiguity
- Use of the exemption should not be premised on ability to control



Reaction

Health Officials & Public

- Change is needed to ensure adequate protection of public health
- Lack of authority to address complaints is frustrating
- OSHA does not inspect source often enough to ensure TLV's are being met in the workplace
- Emissions are being exempted inappropriately



Staff Recommendations (March 2001)

- Leave Definition Unchanged
 - consistency issue can be addressed internally
- Do Not Add OSHA Requirements for Acute, Non-carcinogenic HAP's
 - can develop better relationships with indoor air quality specialists
- Address Concerns In Guidance



Focus of Guidance

Clarification

- Define when and when not to include indoor fugitive emissions for different program elements (permits, standards and inventory)
- List carcinogens and RfC compounds eligible for standards exemption
- Define what makes up an acceptable demonstration of "OSHA compliance"



Focus of Guidance

- Define what general ventilation is (examples)
 - heating or cooling
 - removing a contaminant
 - dilution
 - make-up air
- and is not
 - localized exhaust systems
 - part of a production process